20070122.ba v03_n998.bam.20070122

>From ???@??? Mon Jan 22 11:01:53 2007 -0600
Date: Mon, 22 Jan 2007 17:00:48 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3998
Message-Id: <20070122170050.B97AE3183CE@srvr1.theporch.com>

BOATANCHORS Digest 3998

Topics covered in this issue include:

Message-ID: <BAY101-DAV162CC5613558F2400E4DE3F5AF0@phx.gbl>
From: "RICHARD GEORGE" <k6kwq@msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Command reciever
Date: Sun, 21 Jan 2007 08:48:48 -0800
MIME-Version: 1.0
Content-Type: multipart/alternative;
    boundary="----=_NextPart_000_002F_01C73D38.F775BDA0"

This is a multi-part message in MIME format.

------=_NextPart_000_002F_01C73D38.F775BDA0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Back to boat anchors after a long absence.

I just picked up a nice orignal unmodified BC-453B Reciever. It is in =
good shape but is missing the top tube cover panel. Anyone got an extra? =
State price buy my email please.
I'm also interested in other ARC-5 equipment.
------=_NextPart_000_002F_01C73D38.F775BDA0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

------=_NextPart_000_002F_01C73D38.F775BDA0--

Message-Id: <6.0.2.0.1.20070121141621.043fe2c0@127.0.0.1>
Date: Sun, 21 Jan 2007 14:22:44 -0500
To: Old Tube Radios <boatanchors@theporch.com>

From: "Steve Modena, AB4EL" <AB4EL@MindSpring.com>
Subject: new IEEE book - _Crystal Clear_
Cc: glowbugs@piobaire.mines.uidaho.edu
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"; format=flowed
Content-Transfer-Encoding: quoted-printable

Check out your nearby university library catalog for...

Crystal Clear: The Struggle for Reliable Communications
     Technology in World War II (Hardcover)
by Richard J. Jr. Thompson
http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470046066,miniSiteCd-IEE=
E2.html

Quartz crystal=97a technology that changed the tide of World War II

ISBN: 978-0-470-04606-7
Hardcover
230 pages
October 2006, Wiley-IEEE Press

... In Crystal Clear, Richard Thompson relates the story of
the quartz crystal in World War II, from its early days as a
curiosity for amateur radio enthusiasts, to its use by the
United States Armed Forces. It follows the intrepid group of
scientists and engineers from the Office of the Chief Signal
Officer of the U.S. Army as they raced to create an effective
quartz crystal unit. They had to find a reliable supply of
radio-quality quartz; devise methods to reach, mine, and
transport the quartz; find a way to manufacture quartz crystal
oscillators rapidly; and then solve the puzzling "aging problem"
that plagued the early units. Ultimately, the development of
quartz oscillators became the second largest scientific
undertaking in World War II after the Manhattan Project. ...

Has some boatanchor content and pictures.
--
73/Steve/AB4EL

Message-ID: <BAY110-DAV14849FC18F31ECFD14B459A0AF0@phx.gbl>
From: "JAMES HANLON" <knjhanlon@msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: CBS color wheel/a forward from Scott
Date: Sun, 21 Jan 2007 12:36:30 -0700
MIME-Version: 1.0
Content-Type: multipart/alternative;

```
     boundary="----=_NextPart_000_0196_01C73D58.C6A30FA0"

This is a multi-part message in MIME format.

------=_NextPart_000_0196_01C73D58.C6A30FA0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Tom wrote:
  headlights that pivot as you turn corners!!  How =20
  new!  How thoroughly modern..... Citroen was doing that in the =20
  1950's. =20

  I recall that either Tucker which was to come out in late '45 or '46 =
was to incorporate that feature or that Cord had it before the war.

  Jim, W8KGI
------=_NextPart_000_0196_01C73D58.C6A30FA0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---                  *
*     This post contains a forbidden message format             *
*  (such as an attached file, a v-card, HTML formatting)        *
*    Mail Lists at theporch.com only accept PLAIN TEXT          *
* If your postings display this message your mail program       *
* is not set to send PLAIN TEXT ONLY and needs adjusting        *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------=_NextPart_000_0196_01C73D58.C6A30FA0--

------------------------------
Message-ID: <12012218.1169412860367.JavaMail.root@mswamui-
billy.atl.sa.earthlink.net>
Date: Sun, 21 Jan 2007 12:54:20 -0800 (GMT-08:00)
From: Richard Dillman <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: KSM PW-15 Transmitter on YouTube!
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit


Those who were monitoring the KSM 12Mc signal on Saturday were hearing the
historic Press Wireless PW-15 transmitter the Maritime Radio Historical Society
(MRHS) has restored to operation.  There's quite a bit of history attached to this
```

transmitter.

Built in the 1940s, it was used during WWII by Press Wireless to transmit press reports across the Pacific and around the world. When Press Wireless was absorbed by Globe Wireless, the transmitter was installed at the Globe transmitter site in Palo Alto, CA. After the era of point to point press broadcasts ended, the PW-15 was used as a Morse code transmitter in the marine service for station KFS, talking to ships at sea.

Volunteers from the MRHS recovered the transmitter from the Palo Alto site and installed it (along with another PW-15) at the transmitter site for ex-RCA coast station KPH in Bolinas, CA. It was restored to full operation as the 12.993Mc transmitter for KSM, the station operated by the MRHS. It is believed to be the only PW-15 transmitter still in operation.

In the YouTube video you will see Steve Hawes, Senior MRHS Transmitter Engineer, bring the big transmitter to life. Watch as he confirms the frequency of transmission, turns on the primary power, engages the high voltage power supply and sends a test transmission. A cameo appearance is made by our very own QSL Mistress, Ms. Denice Stoops. See the video at:

http://www.youtube.com/watch?v=uaiwKJgS-Q4

At YouTube you'll be able to subscribe to our "channel" for future videos (but I'll announce them here too).

The primary thing we're interested in is to find out whether you enjoy videos like this showing our operations. Please let me know via return email or by commenting on the video at YouTube.

Enjoy,

RD

==========
Richard Dillman, W6AWO
Maritime Radio Historical Society
http://www.radiomarine.org
Collector of Harleys, Willys and
Radios over 100lbs.
==========

From: W7QHO@aol.com
Message-ID: <ca2.727effd.32e5529d@aol.com>
Date: Sun, 21 Jan 2007 18:34:53 EST
Subject: Re: [Radiomarine] KSM PW-15 Transmitter on YouTube!
To: Old Tube Radios <boatanchors@theporch.com>

MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_ca2.727effd.32e5529d_boundary"

--part1_ca2.727effd.32e5529d_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Great stuff but what's making all the noise. Sounds like it's being powered
by a locomotive size diesel engine, HI!

Dennis D. W7QHO
Glendale, CA

--part1_ca2.727effd.32e5529d_boundary
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

--part1_ca2.727effd.32e5529d_boundary--

Message-ID: <061601c73db6$86727a20$640fa8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: KSM PW-15 Transmitter on YouTube!
Date: Sun, 21 Jan 2007 18:47:24 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="UTF-8";
     reply-type=original
Content-Transfer-Encoding: 7bit

>
> Those who were monitoring the KSM 12Mc signal on Saturday
> were hearing the historic Press Wireless PW-15 transmitter
> the Maritime Radio Historical Society (MRHS) has restored

> to operation. There's quite a bit of history attached to
> this transmitter.
>

What a wonderful thing they have done, restoring and
operating the gear from the days when HF radio was at its
peak!!

How many times a year do we have antique radio nights on the
radio so we can enjoy our older gear?? What and when are
they?

73 Tom

Message-ID: <30380219.1169427353733.JavaMail.root@mswamui-
swiss.atl.sa.earthlink.net>
Date: Sun, 21 Jan 2007 16:55:53 -0800 (GMT-08:00)
From: Richard Dillman <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: KSM PW-15 Transmitter on YouTube!
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

>What a wonderful thing they have done, restoring and
>operating the gear from the days when HF radio was at its
>peak!!

Thanks, Tom. Of course we feel we're the most lucky guys (and gal) in the world
of radio to be able to work on this project.

>How many times a year do we have antique radio nights on the
>radio so we can enjoy our older gear?? What and when are
>they?

All are encouraged to join our mailing list for notices about various operating
events. Just drop an email to:

Radiomarine-subscribe@yahoogroups.com

VY 73,

RD

==========
Richard Dillman, W6AWO

Maritime Radio Historical Society
http://www.radiomarine.org
Collector of Harleys, Willys and
Radios over 100lbs.
==========

From: Charles <charlesmorris@hughes.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Strange rag-chewing HW-101 problem (long)
Date: Sun, 21 Jan 2007 19:57:23 -0500
Message-ID: <7sv7r2l634pp50r72ign4v46hpf0og776g@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I've had an HW-101 for a long time as my primary rig... it was built
in 1977 so I guess it qualifies as a boatanchor even though it's not
Heavy Metal :)

Anyway I usually keep my transmissions short but early this morning on
the 7272 Rag Chew there was only three of us so I "gatored" a bit.
When I let go of the mike button, the receiver was cut off and the
S-meter was nearly pinned. It very slowly returned to normal over
about 15 seconds. On subsequent short transmissions, operation was
normal, but on any extended key-down it recurred.

I got out the schematic, took the cover off, and quickly discovered
that something was driving the AVC line several volts negative on long
transmissions. Just holding the PTT closed with no modulation did not
cause the problem. No one Heath factory service bulletin was a direct
clue but I did come across this:

>SEPTEMBER 21, 1984
>HW-101 Bulletin No:
>SSB Transceiver HW-101-82
>S METER DRIFTS; IF OSCILLATES
>
>Check the brand of 6AU6 tubes at V3 and V4. If a brand other than GE is used at
these locations, replace them with GE brand tubes. Parts replacement will stock
only GE brand of 6AU6 tubes [PN 411-11].

Not very helpful - and I do have GE-made JAN-6AU6-WC tubes in V3 (1st
IF) and V4 (2nd IF, which drives the AVC rectifier). I tried swapping
some other 6AU6's and it didn't help.

Putting the scope on the output of V4 did indeed show the oscillation
at about 3 MHz (at or near the IF frequency), which slowly died out

over a period of about 10-20 seconds, while the AVC voltage returned to normal. It would only recur with extended talking. Although I could not see anything coming out of V3, (old scope,10x probe :) as a test I quickly pulled V3 from its socket and the oscillation stopped instantly.

Also, V4 is definitely being cut off during transmit (its screen voltage is removed), and V2 (Isolation Amp) is cut off during receive (screen voltage removed and actually biased slightly negative). V3 is "on" during both receive and transmit, so I concluded that that stage has to be the source of the problem.

What I can't figure out is the underlying mechanism of the oscillation. I believe that the stage runs hot during receive and even hotter during transmit (the grid bias while transmitting is set from the ALC voltage that is less negative than the AGC signal).

The slow speed of onset and decay also suggests a thermal cause. Does the stage gain vary with internal element temperatures (aside from the heater, of course)? Is this something that can be fixed by, for example, redoing the screen bypass? Or do I need to reduce the gain a bit?

thanks for any help.
-Charles

Message-ID: <1533.66.56.28.127.1169435869.squirrel@fracas.netboobie.org>
Date: Sun, 21 Jan 2007 22:17:49 -0500 (EST)
Subject: Re: KSM PW-15 Transmitter on YouTube!
From: "Marty Reynolds' debris field" <polepeeg@aa4rm.ba-watch.org>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain;charset=iso-8859-1
Content-Transfer-Encoding: 8bit

Yo Tom - u wrote:

>
> How many times a year do we have antique radio nights on the
> radio so we can enjoy our older gear?? What and when are
> they?
>

We're kinda in the high season

This coming Wed. & Sat. night there's a operating event by the antique

wireles assn. Rattle around

http://www.antiquewireless.org

for details

Then weekend following Super bowl there's

http://qsl.asti.net/CX

And there's the Old (time) Military Radio Night on 3570 @ 9:30P est
each Sunday - I think

But R.D. & co. are p/o the only resurection of a comm'l station that
I know.

  Marty

Message-ID: <001301c73dfc$ab442010$1be47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <glowbugs@piobaire.mines.uidaho.edu>
Subject: Re: new IEEE book - _Crystal Clear_
Date: Mon, 22 Jan 2007 00:09:35 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

< .....from its early days as a
curiosity for amateur radio enthusiasts.....

Were crystals really a "curiosity" to hams or, like in many things, hams
were the first to realize the value of predictable and reliable radio
frequncy oscillators way before WW2? Leave it to the media pitch men to
screw up history....

Arden Allen
KB6NAX

Message-ID: <001901c73e02$4b9c0000$1be47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Strange rag-chewing HW-101 problem (long)
Date: Mon, 22 Jan 2007 00:49:52 -0800
MIME-Version: 1.0

Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Just a wild guess after studying the schematic, this seems like a case of control grid poisoning, i.e., the grid gets coated with cathode material and becomes an electron emitter. When that happens tube conduction increases because of the positive voltage appearing at the control grid cancelling the ALC voltage to some extent. The control grid also may be getting heated due to tube heating, particularly if the screen grid is getting pretty hot. The combination of grid poisoning and hard hitting voice signals causes the tube to get hot enough to "run away," so to speak. Transconductance increases with plate current and at some point the stability criterion is exceeded and the stage oscillates. When in receive the additional AVC causes things to cool down and return to "normal." Seems like V3 is getting the crap pounded out of it during modulation in transmit. It may be so bad that even a new tube will start to exhibit the problem. I'll bet Heath was flummoxed by the problem and was pushed to come up with a quick fix. Changing tube brands, to me, is the coward's way out of a fix.

My first step would be to try and overcome an overdrive problem. Improving RF bypassing (shorter caps leads, etc.) may help to quell the osicllation. Eventually I would get to the stage gains and what it takes to make things work properly without trashing tubes. Some head scratching in order here....

Arden Allen
KB6NAX

Date: Mon, 22 Jan 2007 08:25:00 -0600 (CST)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>,
     glowbugs@piobaire.mines.uidaho.edu
Subject: Re: new IEEE book - _Crystal Clear_
Message-ID: <Pine.LNX.4.61.0701220822060.10608@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

On Mon, 22 Jan 2007, Arden Allen wrote:

> Were crystals really a "curiosity" to hams or, like in many things, hams
> were the first to realize the value of predictable and reliable radio
> frequncy oscillators way before WW2? Leave it to the media pitch men to
> screw up history....

I don't recall who first started using xtals or when (sometime in the 20's

I think). My guess is that the Bureau of Standards was one of the first users of xtals. I do remember seeing in old QST's the raving about the great stability and urging everyone to switch over to xtals for transmitting. Then, of course, later we weren't happy with not being able to cruise around the bands so the push was to go back to VFO's.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WD2XSH/19
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <002901c73e31$a1ef90a0$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: FS: 220 Tested, Popular Tubes, 22 Cents Each
Date: Mon, 22 Jan 2007 08:28:47 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Two hundred twenty +
7 & 9 pin vacuum tubes, popular types.
All tested good on my TV-7A:

Twenty Five 6AL5
Twelve 6AH6
Forty Five 6AK5
Six 6X4
Five 0B2
Two 0A2
Ten 35W4
Ten 6AQ5
Twenty 12BA6
Eight 35C5
Seventeen 50C5
Thirty Two 6BA6
Seventeen 6AU6
Twelve 12BE6

Plus throwing in a big pile of untested 6 & 12 volt minitures,
including some dual and single triodes like 12AY7, 6C4, 6D4.

$49.99 to PayPal at my email address,
shipped anywhere in the U.S.

Wider World: Please write for postage rates.

(Please note: Except for the 35W4s, I did not test for shorts,
which puts a lot of wear-n-tear on the TV-7.
At 22 cents, a couple of culls is still a bargain.)

Message-ID: <004501c73e34$84ddd320$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: [Milsurplus] FS: 220 Tested, Popular Tubes, 22 Cents Each
Date: Mon, 22 Jan 2007 08:49:28 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Tubes are sold. Thanks!

Message-ID: <006601c73e35$c8312040$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: [Milsurplus] QRMing the MilRadio Net
Date: Mon, 22 Jan 2007 08:58:29 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Ray Fantini" <rafantini@salisbury.edu>
Subject: Re: [Milsurplus] QRMing the MilRadio Net

> I know its contrary to the group opnion but I have to wonder how much of
> the QRM is deliberate?...

Mr. Hollingsworth had to get involved with the 3878 barbarians
when they made it plain they were going to run-off anyone on AM.
Don't know how much good it did; they're still there...

Recently, I helped circulate an email calling on Extra
ops to come down to 3685- then in the middle of
50 KCs of quiet spectrum- to start an AM calling freq
away from the QRM and antagonisms of 3880.
Right after the email was circulated, a group of half

a dozen SSB ops set up shop on 3686.5 KC
(a fractional freq in the middle of 50 KC of quiet??),
blatantly saying they had seen the email and that they
were going to "discourage the so-called window"
by parking there and complaining to Mr. Hollingsworth
about "deliberate AM interference."
They've already "turned me in," they claim.

Here is something typical:
   "...Have you got that new 4-1000 amp going yet?"
    "No, but I'm working on it."
    "Well, you need to make that a priority to help us
      discourage the proclaimed (AM) window..."

Two nights ago, I listened at 3685 for ten or 15 minutes, hearing
no one. I began to call "CQ." After a few minutes,
the whole group of SSB operators showed-up at once
and I heard:

      "... Yeah, he's down there. Have you got your amp on?"
      "I'm warming it up now...."
      "Hellllllllo! Nothing like 500 watts to clear the band out."

Well, it certainly cleared me out.

So is this "deliberate?"
You bet it is.
Most of the SSB ops in the "gentleman's agreement"
window know what they're doing and
they either don't give a damn, or actively seek a conflict.

I don't understand, especially with the band expansion,
why some people can't allow those with other interests
just a little room to live. I don't see AM ops on 3920,
or 14.335, though my license certainly gives me the right.
I don't want to be so inconsiderate; I want to get along
and give them room for their interests and ask only
that they give me the same consideration.

But my biggest frustration is the AM ops!
I understand the immoral, selfish SSB barbarians.
But most AM ops go hide; they'd rather roll over
and play dead, hoping it will all go away or
that "Riley will handle it." WRONG.
I don't want a war, nor do I want to
"let Riley handle it." I want people to politely but
firmly insist that they have a right to operate
and get active (and strong) enough to stop this mess.

If we roll over and hide from these school-yard bullies,
we can expect the same thing cowards always get.

D.S.

Message-ID: <45B4D8DD.9030702@erols.com>
Date: Mon, 22 Jan 2007 10:31:41 -0500
From: "WA3GIN @ Arlington County, VA" <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: [Milsurplus] QRMing the MilRadio Net
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Your mistake was sending out the email to begin with...to establish an AM frequency in the new space...you should have just started operating there and let folks find you. When you went public with "THE PLAN" you just advertised your intent to sit on the freq. no different than what the SSB babies are doing now or not much different. You have to remember that this hobby is mostly about ego and it attracts some folks that are very much in-search-of-ego stimulation, i.e., big amps, big antennas, big towers, big mouths!

So, do it like a man, go pick a freq. and call CQ. AMers have VFO's - they'll find you! Forget planning and coordination that type of thinking just threatens the ego-challenged and they will swoop down on you like bees to honey. Let them babies squat on that freq. you advertised waiting and listening for the AM station that never transmits while you are down freq. having an enjoyable QSO.

Have FUN,
dave
wa3gin

From: "Ed Sieb" <esieb@sympatico.ca>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: 3685 Kc
Date: Mon, 22 Jan 2007 11:11:04 -0500
Message-ID: <NIBBKNOPFNLAGHLELMPLOEHPLFAA.esieb@sympatico.ca>
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Let them slawbukits squat all they want. Once we're done with them they'll be squatting alright! I possess several high-power AM rigs, 1000W out, and my medium power rig is a measly pair of 813's modulated by 810's. I can get on with Al, VE3AJM, who almost never runs less than 750W output, (a GPT750, or an FRT501 running 4-400's). Let's see what the slawbukits do with that!

Ed, VA3ES

Message-ID: <e1d20d630701220830n84632e2sf4a2148e35581da8@mail.gmail.com>
Date: Mon, 22 Jan 2007 11:30:38 -0500
From: "William Donzelli" <wdonzelli@gmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: new IEEE book - _Crystal Clear_
Cc: "Old Tube Radios" <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

> Were crystals really a "curiosity" to hams or, like in many things, hams
> were the first to realize the value of predictable and reliable radio
> frequncy oscillators way before WW2? Leave it to the media pitch men to
> screw up history....

It was not just the hams - the US Navy (and probably other navies)
were very early users of crystals.

--
Will

Message-ID: <005801c73e45$126b0ea0$69e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: [Milsurplus] QRMing the MilRadio Net
Date: Mon, 22 Jan 2007 08:40:33 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> > I know its contrary to the group opnion but I have to wonder how much of
> > the QRM is deliberate?...

Maybe the Irag Study Group could offer some helpful advice..... :-(

Arden Allen
KB6NAX

From: W7QHO@aol.com
Message-ID: <c69.9e091c6.32e6479b@aol.com>
Date: Mon, 22 Jan 2007 12:00:11 EST
Subject: Re: new IEEE book - _Crystal Clear_
To: Old Tube Radios <boatanchors@theporch.com>
CC: glowbugs@piobaire.mines.uidaho.edu
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_c69.9e091c6.32e6479b_boundary"

--part1_c69.9e091c6.32e6479b_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 1/22/07 6:25:49 AM, broehrig@aurora.edu writes:

> I don't recall who first started using xtals or when (sometime in the 20's
> I think). My guess is that the Bureau of Standards was one of the first
> users of xtals.
>

All,

>From "Proceedings of the 35th Annual Frequency Control Symposium, pp. 3-12, 1981, A HISTORY OF THE QUARTZ CRYSTAL INDUSTRY IN THE US"

Generally accepted that Prof. W. G. Cady at Wesleyan University was the first to use a piezoelectric
crystal to control the frequency of an oscillator. Did this in 1919. Cady used devices which would today be called monolithic resonators having two sets of electrodes on the same crystal. Prof. G. W. Pierce of Harvard University showed in 1923 that a quartz plate with only one set of electrodes could be made to control the frequency of an oscillator circuit using only one vacuum tube. Pierce's circuit has probably been used more than any other quartz crystal oscillator circuit.

In 1923, August E. Miller left the optical business where he had become an expert in grinding quartz lenses to go into the business of making quartz crystal blanks for amateur radio operators or "hams"; the only market which then existed for the new device.

In 1926 the A. T. & T. radio station WEAF in New York City became the first radio station in the United States to control its frequency with a quartz crystal unit. Within a few years all radio stations went to crystal control thus providing another small market for quartz crystal units.

Dennis D. W7QHO
Glendale, CA

--part1_c69.9e091c6.32e6479b_boundary
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

--part1_c69.9e091c6.32e6479b_boundary--

End of BOATANCHORS Digest 3998
****